AMENDED CLAIMS

EXCLUSIVELY PRESENTED FOR CLARITY

037 What is claimed is:

1. A Voltage Dosimeter, including a method for maintaining a desired negative electrode voltage from a voltage producing source in a first predetermined range of values having an upper limit and a lower limit so as to control the positive electrode voltage and maintain a stable base state of voltage production to eliminate the necessity for constant maximum voltage production, said Voltage Dosimeter including an electronic control unit (ECU) having memory, two electrodes, two voltimeters connected to each electrode for measuring voltage at each electrode, an electric switch for activating the device, said Voltage Dosimeter determining a circulation time delay between electrical energy production from said voltage producing source and electrical energy detection at said positive electrode, a battery to activate the device , said voltage producing source determining said positive electrode voltage controlled by said ECU for delivering selected voltage producing doses and positive electrode voltages, said voltage producing sequential plurality of said positive electrode voltage doses ranging from a smallest dose to a largest dose, a reaction time denoting local or extreme

maximum or minimum positive electrode voltage production.

2.The method of Claim 1 further comprising:

delivering the largest initial positive electrode voltage or the subsequent smallest or largest voltage depending on proximity to the desired negative electrode voltage dosage while repeatedly sequencing through the plurality of sequential positive electrode voltage doses beginning with the smallest dose and proceeding to an adjacent dose in said sequence after a predetermined time interval has elapsed until said negative electrode voltage level from said voltage producing source attains the desired voltage level at which point said voltage producing dose and said positive electrode voltage dose are selected to occupy a stable base state of constant voltage from said plurality of sequential voltage producing and positive electrode voltage doses;

delivering the selected voltage so as to maintain said negative electrode voltage level in the desired range in a stable base state.

3. The method of claim 2 wherein said circulation time is determined by:

means for storing a predetermined number of base state voltage values in memory; and

means for determining a predetermined sequence of base state levels.

4. The method of claim 2 in which a plurality of sequential positive electrode voltage doses are generated in fuel cells.

5. The method of claim 2 wherein a plurality of sequential positive electrode voltage values are generated by steam.

6. The method of claim 2 wherein said plurality of positive electrode voltage values are connected by logic switches.

7. The method of claim 2 wherein a predetermined negative electrode voltage level for a predetermined amount of time produces a predetermined voltage producing and positive electrode voltage dose.

8. The method of claim 2 wherein a first closing of said electric switch produces a first battery discharge and a first negative electrode voltage level in a fuel cell.

9 The method of claim 2 wherein said negative electrode voltage range varies with application.

10. The method of claim 2 wherein voltage dosage values of different Voltage Dosimeters are connected by switches controlled by logic.

11. The method of claim 2, wherein maintaining said desired negative electrode voltage of a fuel cell within a first predetermined range of values having an upper limit and a lower limit so as to control said positive electrode voltage of said fuel cell and maintain a stable base state of voltage production, said Voltage Dosimeter determining a circulation time delay between electrical energy production from a reactant gas flow rate to electrical energy detection by a voltimeter, said reactant gas flow rate controlled by said ECU through solenoid valves for delivering selected positive electrode voltage doses, said Voltage Dosimeter having a sequential plurality of positive and negative electrode voltage doses ranging from a smallest dose to a largest dose, a reaction time denoting local or extreme maximum or minimum reactant gas flow rate producing local or extreme maximum or minimum negative and positive electrode voltage levels, the method further comprising:

delivering the largest/smallest reactant gas flow rate determined by proximity of said positive electrode dose voltage to said desired negative electrode voltage dose and the largest/smallest positive electrode voltage dose to the circuit connected to said fuel cell while repeatedly sequencing through the plurality of sequential negative electrode voltage

doses beginning with the smallest dose and proceeding to an adjacent dose in the sequence after a predetermined time interval has elapsed until said negative electrode voltage level of said voltage producing source attains the desired voltage level at which point a corresponding reactant gas flow rate producing a positive electrode voltage dose is selected to occupy a stable base state from said plurality of positive electrode voltage doses;

delivering said selected reactant gas flow rate producing said positive electrode doses so as to maintain said negative electrode voltage level in the desired range in a stable base state.

13. The method of claim 2 wherein said reaction time is determined by logic flow charts.

14. The method of claim 2 wherein said plurality of positive electrode voltage levels are connected by logic switches.

15. The method of claim 2 wherein a predetermined negative electrode voltage level for a predetermined amount of time produces a positive electrode voltage dose.

16. The method of claim 2 wherein a first closing of said electric switch produces a battery discharge and a first negative electrode voltage level.

17. The method of claim 2 wherein the operating negative electrode voltage range varies with application.

18. The method of claim 2 wherein said negative electrode voltage readings are connected by switches controlled by logic.

19. The method of claim 2 wherein said reactant gases are hydrogen and oxygen.